A Circuit to Provide Backup Telephone Service for a Multiple Service Access System Using a Twisted Pair

Abstract of the Disclosure

A subscriber link to a central office which employs data compression, forward error correction, and advanced modulation techniques and to connect subscribers to multiple communications networks to provide an array of services. A device provides normal telephone service in the event of an equipment failure. At the subscriber end, a server called an intelligent services director (ISD) provides multiple independent connections for telephones which ordinarily connect to multiple access virtual circuits generated on the subscriber link over a twisted pair. A device called a facilities management platform (FMP) at the central office end of the link, among other things, provides interfacing of the subscriber link to various networks including a digital subscriber loop (DLC) and packet switched networks. Ordinarily telephones connected to the ISD require power and correctly functioning modems and controllers in the ISD and the FMP to have access to the outside world. A fail-safe mechanism, however allows at least one chosen phone to function in the event of a failure. The chosen phone must be capable of pulse or DTMF dialing. The connection through which it operate can be switched directly to the twisted pair media connecting to the FMP. At the FMP, the twisted pair is switched to tie the connection directly to a line card of the DLC. Alternatively, the ISD contains an interface to a specialized phone designed for the ISD environment. The interface provides the appearance to the DLC of a regular POT